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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,073	01/22/2002	Takashi Murakami	2001P014480	3393

21254 7590 11/02/2005

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EXAMINER	
PAN, YUWEN	

ART UNIT	PAPER NUMBER
2682	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,073	MURAKAMI, TAKASHI	
	Examiner	Art Unit	
	Yuwen Pan	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 14-18* is/are rejected.

7)☒ Claim(s) *9-13 and 19-21* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/24/05 have been fully considered but they are not persuasive.

The applicant argues that prior art of record doesn't teach or suggest "a radio circuit for demodulating the radio signal from the switch". The examiner respectfully disagrees. Based on the claimed language, "a radio circuit for demodulating the radio signal from the switch" is a very conventional and common way of describing a receiving part of a wireless communication system. Almost every single receiver needs at least one demodulator to demodulating the received signal to extract the wanted information. The Nakamura reference depicts an analogous art in which the receiving part comprising at least one switch and one demodulator (see figure 1 or 2). The applicant further argues that the Nakamura reference teaches demodulating the signal prior to detecting which signal has a higher level. My question back to the applicant is how the receivers know which antenna has a better reception. It sounds like that the applicant invention has a non-causal system and the detector described by the applicant could determine which signal is stronger before demodulation. If in this case, the examiner request the applicant recite the page and line number from applicant's specification that teaches that the detector for detecting a better receiving sensitivity one of radio signals without demodulating initial signals in order to get SNR for comparing. And what kind of detection method is utilized by the applicant's invention.

The argument regarding to claim 8, has been the same from previous office action. See the response to argument office action, filed on 6/07/05.

Furthermore, the applicant argues that the examiner has not provided an alleged suggestion of motivation to combine the JP '110 and Nakamura reference. The examiner respectfully disagrees. First of all, utilizing a cable for connect two part of radiophone is admitted prior art (see the figure 6 of applicant's drawing). Second, obviously, the reason of using the coaxial cable is for jointing two part of radiophone (e.g. a foldable phone) as describe in JP '110 and applicant admitted prior art. Clearly, Nakamura doesn't focus on the structure of a radiophone. Its novelty is high power transmission radio signal. Let's say someone wants to make a radiophone, especially a foldable radiophone with high power transmission radio signal. The combination of JP '110 and Nakamura reference is sufficient to do so. There are many ways of combine the two reference since both are for wireless devices comprising two antennas and designed for selection of better signal.

Therefore, the examiner respectfully submits that the previous rejection stands.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura (US006243563B1).

Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for

only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6).

4. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Wataya (JP09046110).

Wataya discloses a portable telephone set comprising a radio circuit for demodulating a radio signal received by an antenna and transmitted via a cable (item 32, paragraph 27), and a battery (item 9) for supplying power to the radio circuit (paragraph 21), wherein: the battery and the radio circuit are interconnected by the cable, and power from the battery is supplied via the cable to the radio circuit (see figure 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2-7, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US006243563B1) in view of Wataya (JP09046110).

Per claim 2, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting

and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6). Nakamura doesn't expressly teach that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable. Wataya teaches that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 18, 21, 22, and 32). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with Nakamura's device such that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claim 3, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6). Nakamura doesn't expressly teach that the switch provided in a first housing, a radio circuit provided in a second housing, the switch and the radio circuit being interconnected by a cable, and a battery for supplying power to at least the radio circuit, said battery being provide on a side of the first housing, the switch an the radio circuit being interconnected by a cable and power from the

battery being supplied via the cable to the radio circuit. Wataya teaches that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 18, 21, 22, and 32), and a battery for supplying power (see figure 1 and items 9 and 23) to at least the radio circuit, said battery being provide on a side of the first housing, the switch an the radio circuit being interconnected by a cable and power from the battery being supplied via the cable to the radio circuit. It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with Nakamura's device such that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claim 4, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6), and the individual antennas being secured. Nakamura doesn't expressly teach that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable. Wataya teaches that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 18, 21, 22, and 32). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with

Nakamura's device such that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claim 5, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6), and the individual antennas being secured. Nakamura doesn't expressly teach that the switch provided in a first housing, a radio circuit provided in a second housing, the switch and the radio circuit being interconnected by a cable, and a battery for supplying power to at least the radio circuit, said battery being provide on a side of the first housing, the switch an the radio circuit being interconnected by a cable and power from the battery being supplied via the cable to the radio circuit. Wataya teaches that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 18, 21, 22, and 32), and a battery for supplying power (see figure 1 and items 9 and 23) to at least the radio circuit, said battery being provide on a side of the first housing, the switch an the radio circuit being interconnected by a cable and power from the battery being supplied via the cable to the radio circuit. It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with Nakamura's device such

that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claims 6, and 14, Wataya further teach that the radio circuit and the cable are connected in parallel via coils and capacitors (see figure 1 and items 10, 17 and 32), and power from the battery is supplied via the coil side to the radio circuit (see item 22), and a radio signal received by either one of the antennas is transmitted via the capacitor side to the radio circuit.

Per claims 7 and 15-18, Wataya further teach that the cable is a coaxial cable (see figure 1 and item 32).

Allowable Subject Matter

7. Claims 9- 13, and 19-21 are allowed.

Prior art of record doesn't teach that a portable telephone set including a first housing provided with a first and a second terminals to be connected with a first and second external antennas, and a second housing electrically connected via a coaxial cable and mechanically connected with the first housing, and interrelation and position of each substantial element of the portable phone within the vicinity of the housings.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 571-272-7855. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quochien Vuong can be reached on 571-272-7902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yuwen Pan
October 28, 2005

10/28/05

QUOCHIEN B. VUONG
PRIMARY EXAMINER